



The Minuteman Repeater Association

A non-profit organization providing communications infrastructure and volunteers for community and emergency events.



The Minuteman

Volume 49, Number 5

May 2020

Wednesday, 20 May, 2020 ~ Annual Meeting & Elections ~ 7:30—9:30 pm
ARRL Antenna Book Software: TLW, YW, HFTA, EZNEC ~ Larry Banks, W1DYJ
Location: ZOOM — Members: login to the MMRA Webpage for the link
Non-members: send an email to contact@mmra.org

This “Antenna Modeling 101” presentation will start with why Larry has always studied antennas. It will then highlight the various software packages available in three ARRL Books. Detailed use of four packages – TLW, YW, HFTA, and EZNEC, using some of his homebrew antennas as examples – will help you get a start at modeling your own antenna systems.

Larry was licensed in 1962 as novice KN1VFX and then Technician, K1VFX. He received W1DYJ in 1966 while in college in Cambridge and holds an Amateur Extra Class license.

He developed diagnostic cardiac systems as an engineer and manager for Hewlett-Packard Medical in Waltham and Andover from 1969 to 1985. From 1985 to 1993 he was the Section Manager responsible for establishing the Cardiac Ultrasound R&D lab's Computer Aided Design environment, the SW Testing and Quality group, and ongoing Technical Education. Moving to HP Corporate Education in 1993, he became Agilent Technology's manager for their global LMS (Learning Management System) when Agilent split out of HP in 1999. From 2005 to 2012 he consulted for Avago Technologies (now Broadcom) when it split out of Agilent, serving as global manager for their corporate LMS and consulting on eLearning. Larry holds three degrees in Electrical Engineering from MIT.

When he is not playing with antennas, he spends his time chasing DX and contesting, both in Woburn and at his second home in Maine; with his second hobby of woodworking; and with his wife Maren attending jazz and classical concerts and traveling. He is the Net Manager and Newsletter Editor for the MMRA, a member of the YCCC, Publications Editor for FEMARA which runs the Northeast HamXposition, and a board member of the Merrymeeting ARC in Downeast Maine.

MMRA Officer Nominations:

♦ N1DCH	David Hornbaker	President
♦ WA1MDD	John Spencer	Vice President
♦ K1KWP	Kevin Paetzold	Treasurer
♦ W1HFP	Jason Peardon	Secretary
♦ KC1JUO	Charles Miller	Clerk
♦ N1DDK	James Lee	Director → 2023
♦ N1BE	Bob Evans	Director → 2023

Table of Contents

May Membership & Annual Meeting	1
MMRA Information	2, 11, 12
President's Corner	3
On-Line VEC Sessions	
FY 2019-2020 Treasurer's Report	4
Get Connected on the our Repeaters	7
April Business Meeting Minutes	8
Share a Shack!	10
Club Activities while at Home	12

About the Minuteman Repeater Association

MMRA Control Operators Responsibilities

<https://www.mmra.org/MMRACOPolicy-March2019.pdf>

The Minuteman Repeater Association (MMRA) is dedicated to Amateur Radio and public service. The MMRA maintains a large system of repeaters in Eastern Massachusetts.

The MMRA meets each month from September to June. Meeting times, locations, and talk-in frequency vary and are announced in this newsletter and on weekly nets. Meetings are open to all interested parties. Guest speakers and programs of general interest occur in September, November, January, March, and May. The intervening meetings are also open to all members and are for general business.

The Minuteman newsletter is emailed one week before each general interest meeting. Members are encouraged to submit articles: send to the editor at newsletter@mmra.org. The deadline for articles is the last Friday of the month preceding the meeting.

Each Tuesday evening at 8PM the MMRA links most of the repeaters for an open net. The topic is "Technical Information and Other Stuff". Join us!

Membership in the MMRA is open to all radio amateurs. Annual dues are \$25 per individual or \$35 per family. See our website for details.

Contact information is listed on the top of the last page of this newsletter.

No part of this newsletter can be copied or posted elsewhere without prior approval from the club.

MMRA QRM Policy

MMRA members and all other operators are strongly encouraged to report repeater activity that does not abide by Part 97 rules or accepted amateur radio practice to the board of directors at contact@mmra.org or via other means.

The most effective way (and probably the only effective way) to deal with an individual causing QRM is to NOT engage that individual on the air. Please include the time and date of any incident.

Repeater and Frequency Information

Band	XMTR Location	Freq	PL	Call	Linking	
					To Hub 1	To Hub 2
MMRA Voice Repeaters						
10m	Marlboro East	29.680	131.8	W1MRA	PTL	PTL
6m	Marlboro East <i>Rmt receive Marlboro West: PL=100</i>	53.810	71.9	W1BRI	PTL	PTL
2m	Brookline	145.160	na	K1MRA	D-Star (REF050C)	
	Belmont	145.430	146.2	KC1CLA	PTL	FTL: DARI
	Mendon	146.610		K1KWP	FTL	PTL
	Quincy	146.670		W1BRI	PTL	PTL
	North Reading	146.715		KC1US	PTL	PTL
	Weston	146.790		N1BE	PTL	PTL
	Boston <i>Remote receive in Brookline Boston: PL = 127.3</i>	146.820		K1BOS	FTL	PTL
	Marlborough	147.270	146.2	W1MRA	PTL	PTL
1½m	Marlborough	223.940	103.5	W1MRA	PTL	FTL
	Quincy	224.400		N1KUG	PTL	FTL
	Weston	224.700		N1NOM	PTL	FTL
	Burlington	224.880		KC1US	PTL	FTL
70cm	Lowell	442.250	88.5	K1LVF	FTL	PTL: 446.775
	Weston *	442.700		N1DCH	Network Hub 2 (PTL to Hub 1)	
	North Reading	446.775		W1DYJ	FTL	PTL
	Marlborough	448.225	na	W1MRA	D-Star (REF050C)	
	Hopkington	449.575	88.5	W1BRI	PTL	PTL
	Marlborough *	449.925		W1MRA	Network Hub 1	
33cm	Boston *	927.0625	D244	K1RJZ	PTL	PTL
	Marlborough *	927.700		W1MRA	PTL	PTL
PL out = 131.8						
Marlborough		144.390	none	W1MRA	APRS Digipeater	
???		145.630	146.2	W1MRA	Fox Box	
*Internet	HUB1- 449.925: IRLP node 4133 / Echolink node 4133 Connected to Echolink NEWENG2 conference (9127) for TIAOS net.					
	HUB2 - 442.700: IRLP node 4136 / Echolink node 4136 Connected to 220 Reflector 9124 on Tuesdays					
	927.0625: IRLP 4977			Normally linked to the NE900 Reflector, 9125. Linked to MMRA via IRLP node 4134 for the TIAOS net. Normally linked together.		
	927.700: IRLP 4978					

Notes: FTL = Full Time Linked (or default state) PTL = Part Time Linked (on schedule or demand)

President's Corner ~ David Hornbaker, N1DCH

We can stay connected in a quarantined world. Amateur radio is in a unique position to stay connected, both locally and worldwide. In addition to the MMRA TlaOS net every Tuesday there are several other local nets that you can participate in <https://ema.arrl.org/eastern-ma-nets/>.

If you are just getting started, you do not need the perfect antenna. For VHF/UHF a mag mount antenna on a sheet pan will work well. An old coat hanger and a coax connector can be made into a very inexpensive 2-meter vertical (<http://w6par.org/wp-content/uploads/2018/03/CoatHangerAntenna.pdf>).

On HF, I have worked Europe on 20 and 40 using a homebrew 6 m $\frac{1}{2}$ wave dipole and an antenna tuner, not optimum, but it works. In the last few weeks, I have worked special event stations in Spain, Italy, Louisiana, and Texas on 20 and 40. Again, I do not have resonant antennas, or a big amp, or sunspots, just 100 watts and a wire. Get on the air and get connected!

This month's membership meeting and annual elections will be on a Zoom teleconference. The link for the meeting is <https://us02web.zoom.us/j/83007194489?pwd=ZUNxenhwOFpEL3UOT2tsUjgrSTB4dz09>. If you have not used Zoom before, I would encourage you to try it out **before the meeting**. Install the client (available for Windows, Mac, Linux, iOS, and android) or connect via the web. Then connect to the zoom test meeting <https://zoom.us/test>. More information is available at www.mmra.org.

Stay safe and stay connected! 73 – Dave – N1DCH

Notice:

Memberships expire on August 31st. With HamXposition delayed until November you will not have a chance to renew your membership at the conference. Please go to our web: www.mmra.org, log in and click the **RENEW MEMBERSHIP link.**

New England Amateur Radio holding on-line VEC sessions **Bob Phinney, K5TEC**

New England Amateur Radio Inc (NE1AR) in collaboration with New England Sci-Tech in Natick, MA, has authorization of the ARRL VEC and the FCC to administer fully online video-supervised exams. These non-profit educational organizations, founded by Bob Phinney K5TEC and Ted Reimann W1OG and managed by a board of directors, support STEM education for all ages with an emphasis on amateur radio. Bob and Ted began a series of trials on April 1 under ARRL VEC review and are now supervising a team that provides ARRL approved video-supervised test sessions almost every day of the week. They are also training other ARRL-vetted teams across the country and are working with the software developer of the exam delivery system, ExamTools.org and HamStudy.org, to help them streamline the system for video-supervised testing. At the moment only one person at a time can be tested, which limits the number of candidates and adds significant time to the VE team's schedule. An additional time issue is how long it takes a candidate to go through the security protocol involving video-checking the candidate's work area and room, reading the protocols, getting the electronic surveillance set correctly, etc. Sometimes the setup and follow-up for an exam takes longer than the exam itself, in order to provide complete integrity of the exam session. Currently they have a backlog of several hundred who want to be tested, so the team is giving priority to candidates who need to take the AE exam before June 30.

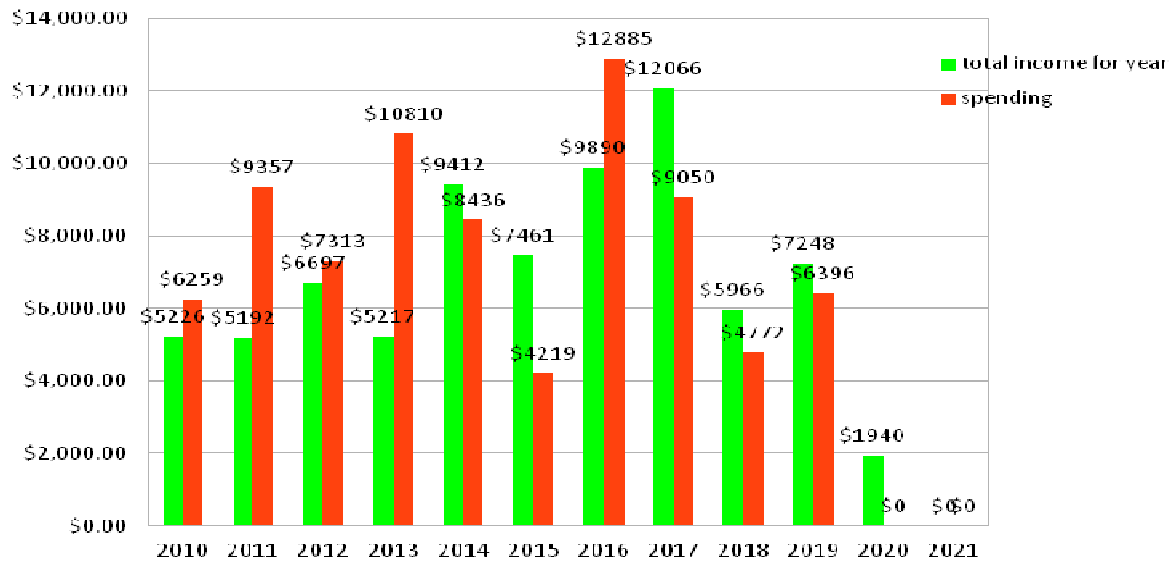
Treasurer's Report, May 2020 ~ Kevin Paetzold, K1KWP

The current MMRA fiscal year ends on May 31 of this year. That fiscal year was known as 2019-2020. Pretty much everything in this article is about that current fiscal year.

A new year begins on June 1, 2020. That new year will be known as 2020-2021.

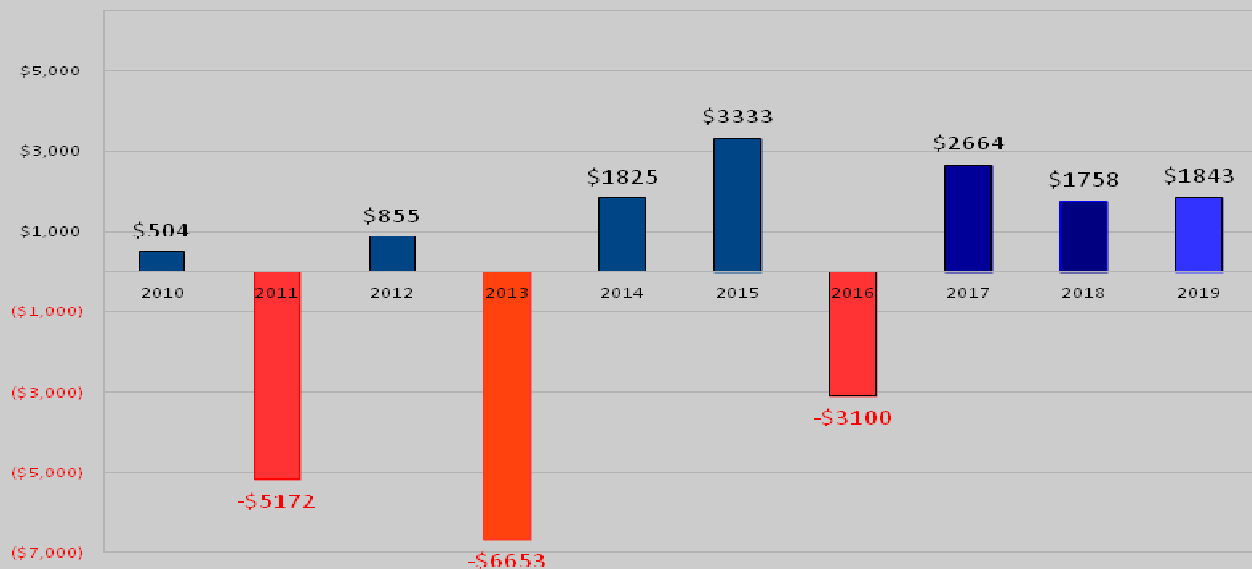
MMRA income exceeded expenses in this fiscal year. A summary of the income and expenses for the last 10 years is in chart below. This current fiscal year is labeled as 2019. You can also notice that due to people paying dues for future year we are already recording income for the 2020-2021 fiscal year.

Income and Spending per membership year



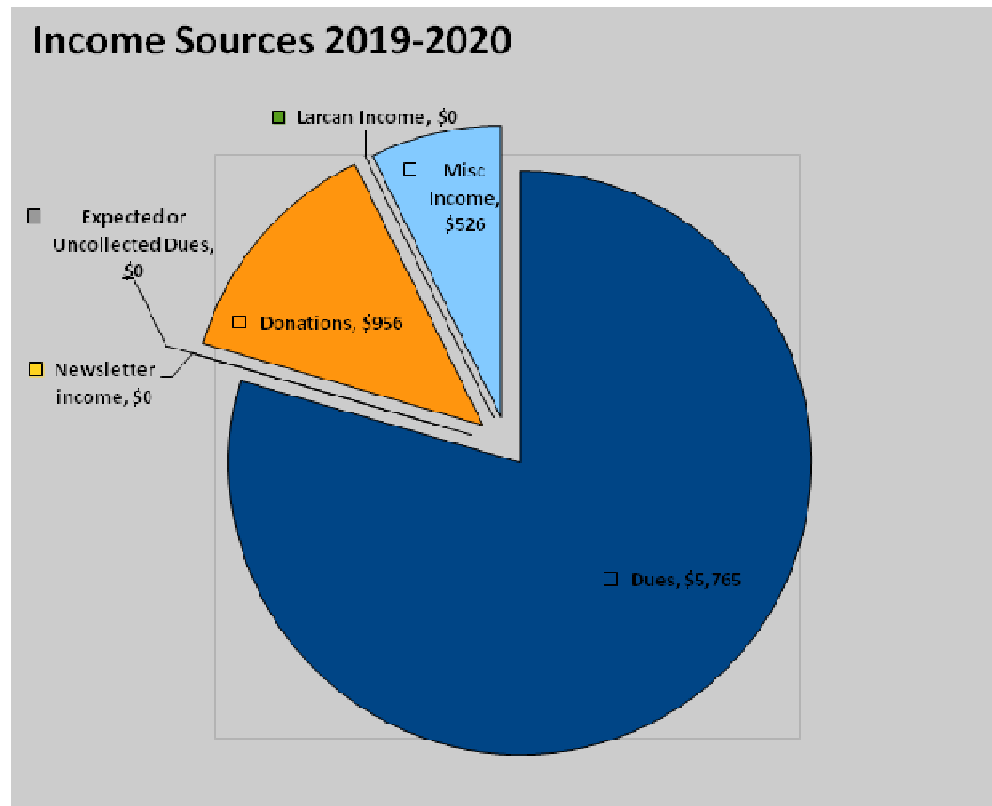
The chart (below) shows the funds balance delta for the last 10 years. This indicates we have had a surplus the last 3 years. Keep in mind that some years we have much greater expenses due to repairs and improvements (see 2011-2012, 2013-2014, and 2016-2017).

Actual Balance Deltas

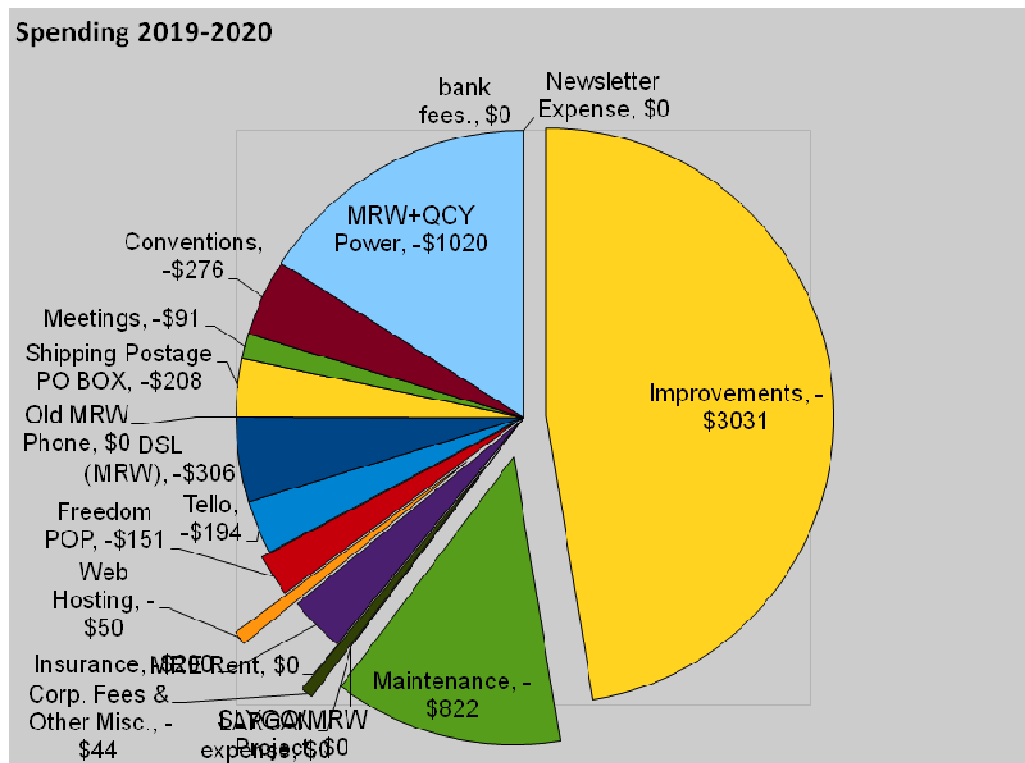


Treasurer's Report, Cont'd ~ Kevin Paetzold, K1KWP

Income sources are detailed below. As you can see large majority of income is from dues.



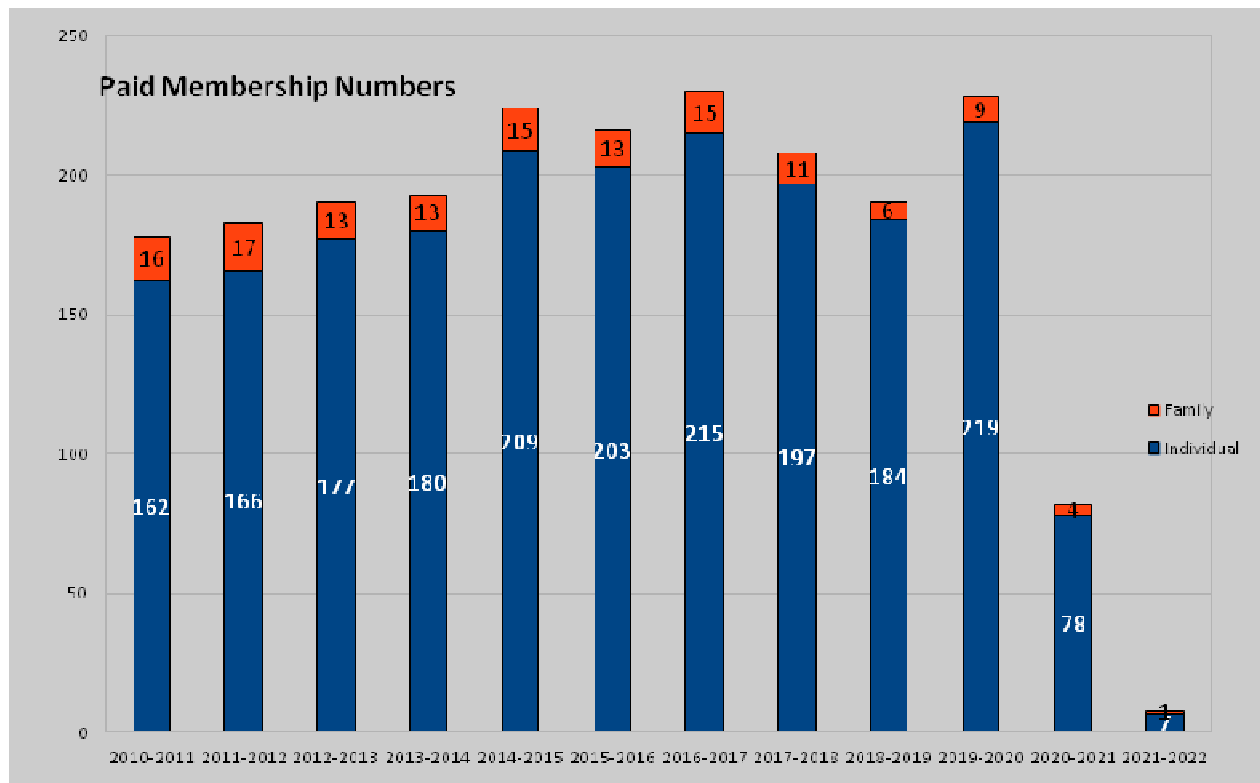
Spending details are below.



Treasurer's Report, Cont'd ~ Kevin Paetzold, K1KWP

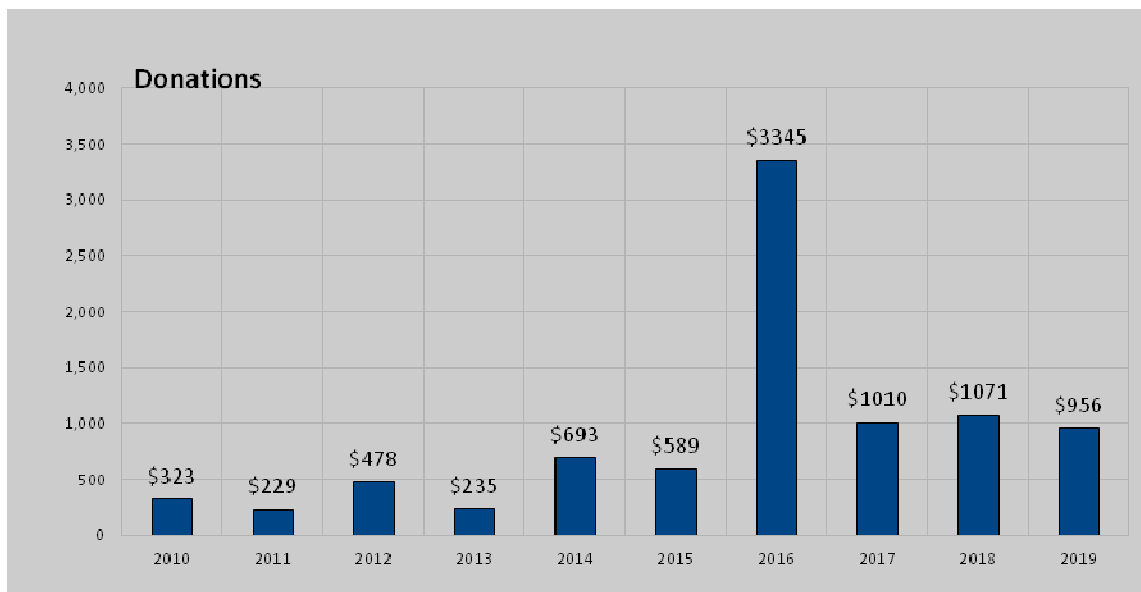
Item	Expected outstanding	prepaid balances	projected totals for year	actual so far
Electric (MRW)	-\$0.06	\$61.98	-\$735.06	-\$735.00
Electric Quincy	-\$3.44	\$18.56	-\$288.44	-\$285.00
DSL Extreme (MRW ISP)	-\$28.82		-\$334.65	-\$305.83
Tello	-\$5.00		-\$193.61	-\$188.61
MRE rent	-\$300.00		-\$150.00	\$0.00
new website for 2019			-\$50.00	-\$50.00
ARRL Insurance			-\$61.36	-\$200.00
Corporation Fees			-\$18.50	-\$18.50
Shipping/postage/PO BOX			-\$207.92	-\$207.92
boxboro brochure – for2019			-\$250.00	-\$250.00
Meetings	-\$25.00		-\$115.93	-\$90.93
Burlington 220 control stuff	-\$78.85		-\$700.00	-\$621.15
Mendon control stuff	-\$78.85		-\$700.00	-\$621.15
mrw antenna project			-\$1320.00	-\$1320.00
Boxboro stuff and Prizes				
Bank Fees/checks	\$0.00		\$0.00	\$0.00
Improvements (other than MEN/BUR)	\$0.00		-\$1711.14	-\$1711.14
Maintenance			-\$821.94	-\$821.94
totals	-\$520.02	\$80.54	-\$7658.55	-\$7427.17

Last year (2019-2020) the MMRA had 228 paid memberships.



Treasurer's Report, Cont'd ~ Kevin Paetzold, K1KWP

The MMRA receives a significant amount of donations each year. Most of this is in direct \$ contributions. Some donations are of equipment which the club either uses or sells. Donation summary for the last ten years is below.



On behalf of the club I would like to thank people below who donated since my list in the previous newsletter.. Hopefully I did not leave anyone off (and if I did I am sorry):

NIUPY WINPE K1MPS

Detailed financial information is presented at almost every business meeting. These meetings generally occur in the months which do not have general membership meetings. They are announced on the www.mmra.org website. All members are invited and encouraged to attend these meetings. Of course much more than finances are discussed at these meetings including repeater status, repeater decisions, planning, etc....

73, K1KWP

Get connected on the MMRA Repeater System ~ Dave Hornbaker N1DCH

What is the best way to get connected on the MMRA repeater system? Try announcing yourself! Just say your call sign followed by "listening". If you want, you can include the last 3 digits of the repeater frequency. For example, "N1DCH listening" or maybe "N1DCH listening on 925", you may very well get a response. Try to connect by announcing yourself several times.

Most of the time, Marlborough Hub1 (449.495) is linked to the following repeaters, Boston (146.820), North Reading (446.775), Mendon (146.610), Lowell (442.250), and Hopkinton (449.575). Remember that when the repeaters are linked, you need to wait two or three seconds after you key up and before you speak. This is especially important on the TlaOS net on Tuesday when most of the repeaters are linked.

Try one of the non-linked repeaters too. There are Hams monitoring them as well. For more information on the repeater network and how it is linked at various times, check out https://mmra.org/repeaters/repeater_linking.html.

73 – Dave – N1DCH

15 April 2020 Business Meeting Minutes

Larry Banks, W1DYJ ~ Clerk pro-tem

By ZOOM Teleconference

Called to order at 7:36 PM local

In attendance:

Dave, N1DCH; Kevin, K1KWP; Jason, W1HFP; John, WA1MDD; Bob, N1BE, Bruce, KC1US; Bob, K1IW; Roger, WA1NVC; Chris, KC1MRK; Charles, KC1JUO; Bill, N1KUG; Larry, W1DYJ

Old Business

Should we purchase a Yaesu DR2X to be used as a backup repeater?

Discussion points brought up: Do we need a backup repeater? Should we replace the North Reading 440 DR2X with something else and use it as a backup? Should we purchase something else as a backup? Will it ever really get used?

Moved (K1KWP): recommend to the Annual Meeting that we purchase a DR2K for \$700.

APPROVED 11-1

New Business

Given the current COVID-19 climate, what teleconference application should we use?

Tonight's application: ZOOM Pro

- \$14.99/month (credit card or PayPal)
- Ability to save recordings locally
- Windows, Mac, Linux, iOS, Android clients
- Meetings up to 24 hours with 100 connections
- Phone Number for phone access
- Security?

Skype

- Free (unless we do Skype for Business and that would be very expensive)
- Unlimited connections
- Windows, Mac, Linux, iOS, Android clients
- Recordings available on cloud for 30 days

Others

This topic generated a lively discussion. There are many pros & cons for each application discussed.

Moved: reimburse Dave (N1DCH) for two months of ZOOM pro, use it for the May membership meeting, and review afterward.

APPROVED: unanimous

Elections

All current board members, except Clark (N1NVK), have agreed to run for reelection. N1BE is interested in serving as director

Moved: with the addition of N1BE as Director, recommend the slate of officers to the full membership at the Annual Meeting.

APPROVED: unanimous

Linking repeaters during severe weather

- Should repeaters be linked during severe weather?
- Would Rob (KD1CY) want us to link things up?

After some discussion, including that the SKYWARN repeater configuration has been in place for

December 2019 Business Meeting Minutes ~ continued

20 years or so, the consensus was that KD1CY should be asked if we can help in the future.

Kevin (K1KWP) agreed to approach Rob to offer MMRA assistance in whatever way made sense

HamXposition November 2020

Postponed to November – will postpone discussion until October

MMRA Network Status

The following sites have their replacement equipment ready for install but, progress is stalled due to the COVID situation:

Belmont: New link radio and antenna >> *in K1IW's garage*

Mendon: Controller Upgrade >> *in K1IW's garage*

Burlington: Replacement RX Crystal >> *KC1US has it, waiting to get into Lahey Hospital*

The following sites require an OS upgrade:

BOS (927.0625) >> *Done by the time the meeting started*

MRX (927.7000) >> *Done by the time the meeting started*

HUB2/WES >> *In process during the meeting*

HUB1 (OS is recent, but is corrupt) >> *Finished after the meeting*

There was much discussion about the future of our OS upgrades at our repeater sites.

MRW & BRK are Dstar and run Centos 7

HUB2/WES is on Raspbian 9

All other sites are Raspbian 8

Centos 7 & Raspbian 8 are still supported

Latest OS is Raspbian 10

With Raspbian, you have to update one version at a time (separate steps). Each step takes 100's of MBs.

We would have to have Tello service on our 5 Freedompop lines in order to do upgrade.

Also risk breaking something when done remotely – then a site visit is necessary

After much discussion, the consensus was that replacing the micro SD cards (with new, updated images) made the most sense. This will be easy except at the Quincy site which is difficult to access. Issues about using any OS other than Raspbian 10 were mentioned.

Upcoming Meetings

May – W1DYJ Antenna Modeling – ZOOM Teleconference

June – Business Meeting -- Marlborough Central Fire Station if allowed

September – Paul - W1SEX Oscilloscope presentation -- Leominster EMA If allowed

November – MMRA information session and drawing at HamXposition

November – Jeremy - KB1REQ -- Mobile (motor vehicle) radio installations

New England Sci-Tech

Newsletter

Information to Larry, W1DYJ by Friday, 24 April (Larryb@alum.mit.edu)

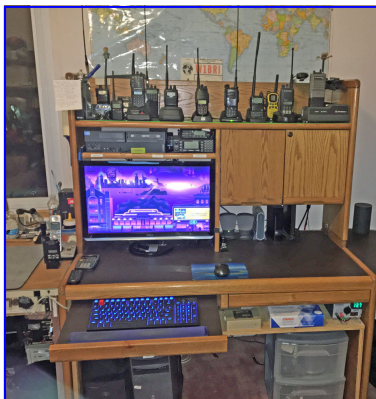
Meeting Adjourned at 8:45 PM local

Submitted by Larry Banks, W1DYJ, Clerk pro-tem

Share a Shack!

Editor's Note: Welcome to the first in a new MMRA Feature Series: sharing a member's ham shack. With the current COVID situation many of us are becoming used to ZOOMing rather than meeting in person. Seeing various shacks in the video backgrounds made me curious. If you have a shack you are willing to share, *let me know*. Complex shack or simple, fixed or mobile, new ham or oldie like me, I'm sure that we are all curious about other's shacks. And this will give us all a way to steal ideas from each other — a basic premise of Ham Radio. The feature will appear based on your input! Larry, W1DYJ

Bryan, W1BRI, the MMRA's Technical Officer Emeritus (and still very involved in keeping all of our stuff operating) and currently a repeater trustee, graciously agreed to be the first to do so.

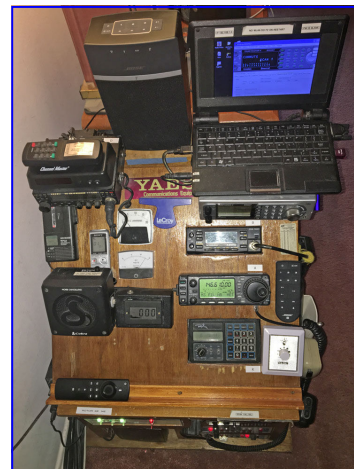


My Computer Desk
and HT collection

Bryan will be happy to tell you what all of the detailed stuff is — just ask him!



The Milford UHF Repeater /
6 Meter Remote Base /
Echolink / APRS Station

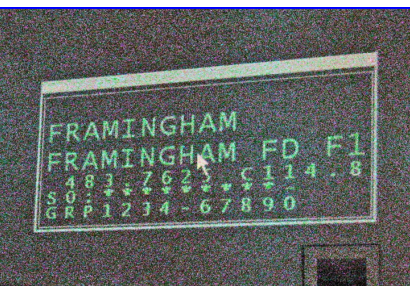


My bedside ham radio /
scanner console.



Scanner VGA mini projector setup on top of light as a stand to project ProScan application running on Asus net book onto wall above TV. This is so I don't have to keep turning my head every time towards the scanner to see what is being received.

(Bryan also has 8 WiFi switches in many places so he can say "Alexa" turn on/off projector etc.)



Repeater backup battery 750W Diehard AC Inverter 1500 VA UPS (Cyber-Power 1500PFLCD)
Prepper LED light bar connected to portable power sled and ready to go if AC power is lost ☺

Repeater backup battery, chargers and 1500VA UPS to keep Liva mini PC, Asus netbook and scanners running for 3 hours upon AC power loss. Also have another big battery on piece of wood with furniture sliders and DieHard 750W inverter that I pull around on the rug to have AC power where I might want it during a blackout. Astron supply is for running my Icom 706 MII G.

Upcoming MMRA Meetings

Note: Meeting locations and times are subject to change.

Consult the MMRA website for the most up-to-date information.
Teleconference numbers will be available one week before a business meeting—if you wish to attend, email contact@mmra.org.

Sunday, 8 Sept ~ Northeast HamXposition @ Boxboro Noon

Wednesday, 18 September ~ Membership Meeting ~ 7:30 PM
Two Ideas for Skyhooks Larry Banks, W1DYJ
Location: New England Sci-Tech Inc., Natick

Wednesday, 16 October ~ Business Meeting ~ 7:30 PM
Location: New England Sci-Tech Inc., Natick + Teleconference

Wednesday, 20 November ~ Membership Meeting ~ 7:30 PM
Amateur Radio Tower Safety: Is It Time for Change? Jim Idelson ~ K1IR
Location: Marlborough Central Fire Station

Wednesday, 18 December ~ Business Meeting ~ 7:30 PM
Location: Marlborough Central Fire Station + Teleconference

Wednesday, 15 January ~ Membership Meeting ~ 7:30 PM
Speaker/Topic: Paul Topolski, W1SEX, Heathkit: History and Restoration
Location: Leominster EMA

Wednesday, 19 February ~ Business Meeting ~ 7:30 PM
Location: Teleconference

Wednesday, 18 March ~ Membership Meeting
CANCELLED

Wednesday, 15 April ~ Business Meeting ~ 7:30 PM
ZOOM Teleconference

Wednesday, 20 May ~ Annual Meeting & Elections ~ 7:30 PM
Antenna Software: TLW, YW, HFTA, EZNEC Larry Banks, W1DYJ
Location: ZOOM Teleconference

Wednesday, 17 June ~ Business Meeting ~ 7:30 PM
Location: TBA

Don't Forget! Join Us.

Every Tuesday @ 8 PM

Technical, Informational and Other Stuff Net

The MMRA's repeaters are linked Tuesday nights for the TIOS Net. Keep up with what's happening in the MMRA and ask your ham related questions.

Net Control Operators:

Week 1	W1DYJ	Larry Banks
Week 2	WA1JIM	Jimmy Devaire
Week 3	KC1CLA	Ed Curley
Week 4	K1KWP	Kevin Paetzold
Week 5	KB1OQA	Tom Turner
Substitute	K1BTZ	Jonathan Traum

To connect using Echolink / IRLP during the Net:

- Echolink Conference *NEW-ENG2*
- IRLP node 4133

MMRA Leaders

Executive Board — Officers

President	Dave Hornbaker	N1DCH
Vice President	John Spencer	WA1MDD
Secretary	Jason Peardon	W1HFP
Treasurer	Kevin Paetzold	K1KWP
Clerk	Charles Miller	KC1JUO

Executive Board — Directors

Director »2020	Clark Conti	N1NVK
Director »2020	James Lee	N1DDK
Director »2021	Bob DeMattia	K1IW
Director »2021	Roger Coulson	WA1NVC

Technical Officer

Technical Officer	Bob DeMattia	K1IW
-------------------	--------------	------

President Emeritus

Bob DeMattia	K1IW
--------------	------

Technical Officer Emeritus

Bryan Cerqua	W1BRI
--------------	-------

Repeater Trustees

* Belmont 145.43	Ed Curley	KC1CLA
* Boston 146.82	John Mullaney	K1BOS
* Boston 927.0625	Rick Zach	K1RJZ
* Brookline 145.16	Joyce DeMattia	K1IWW
* Brookline Rcv 146.82	Bob Phinney	K5TEC
* Burlington 224.88	Bruce Pigott	KC1US
* Hopkinton 449.575	Bryan Cerqua	W1BRI
* Lowell 442.25	Vince De La Flor	K1LVF
* Marlborough 53.81	Bryan Cerqua	W1BRI
* Marlborough: 29.68, 144.39, 147.27, 223.94, 448.225, 449.925, 927.70 : all as W1MRA—Bill Northup	N1QPR	
* Mendon 146.61	Kevin Paetzold	K1KWP
* N. Reading 146.715	Bruce Pigott	KC1US
* N. Reading 446.775	Larry Banks	W1DYJ
* Quincy 224.40	Bill Dunn	N1KUG
* Quincy 146.67	Bryan Cerqua	W1BRI
* Weston 146.79	Bob Evans	N1BE
* Weston 224.70	Eddie Mulhern	N1NOM
* Weston 442.70	Dave Hornbaker	N1DCH

Additional, non-Voting

* Newsletter Editor	Larry Banks	W1DYJ
* Emerg. Coord.	Kevin Paetzold	K1KWP
* Pub. Serv. Coord.	Bruce Pigott	KC1US
* VEC Liaison	Bill Wade	K1IJ
* Net Manager	Larry Banks	W1DYJ
* Web Page Editor	Bob DeMattia	K1IW

* Appointed

Contacting the MMRA



Members: MMRA@yahoogroups.com

Note: This may take some time.

You must be approved by the moderator.

Officers: contact@mmra.org

Control Ops: control-ops@mmra.org



<http://www.mmra.org/>



@mmraham



<https://www.facebook.com/mmraham>

Ask your friends to become a member

Just let them know that it is not fully automated. Although they can log into the MMRA website immediately, they need to be manually processed. This could take up to week.

If you haven't updated your MMRA profile in a while, now is the time!

Go to < [MMRA.ORG](http://www.mmra.org) > and log in to do so.

Previous issues of the MMRA Newsletter are available at:

www.mmra.org > [Newsletter Archive](#) (on the left)

MMRA VE Sessions

Check here for the schedule:

<http://www.mmra.org/exam.html>

Contact: Bill Wade, K1IJ 617-699-3670

CLUB ACTIVITIES – WHILE STAYING AT HOME

By Bruce Blain, K1BG, EMA Affiliated Club Coordinator (ACC)

What a difference a month makes! Eastern Massachusetts affiliated clubs have responded in a number of ways to the current Covid-19 crisis. Some have simply shut their doors until the current crisis is over, which is understandable given the circumstances. Others have chosen to follow the Marine Corps slogan: improvise, adapt, and overcome.

For some clubs, a combination of club nets, repeaters, calling frequencies, and webinars continue to be used while meetings cannot be held. While club nets, repeaters, and calling frequencies have been used by clubs for many years, the frequency and participation has picked up as a greater focus has been placed on them. Some clubs are taking advantage of webinar products from WebEx, GoToMeeting, Amazon Chime, and Zoom, and have conducted webinars for both regular club meetings and board meetings.

For instance:

New England Sci-Tech recently had Mark Rudd, KC1LOM, speak regarding Titanic's "Marconi Radio" and related broadcast history at their weekly Zoom meeting. The talk drew a crowd of over 50!

In addition to their weekly 2-meter repeater net on Tuesday and 10-meter net on Thursday, Wellesley ARA purchased a year's subscription to Zoom Pro. I attended their webinar last week. Turnout was heavy and there was a lot of participation by those in attendance.

There are many benefits to holding webinars right now. Participants who live physically distant from their clubs can participate, as can those with physical limitations. A much larger variety of guest speakers are available to speak if they don't have to personally attend. Want some great ideas for guest speakers, both during and after the Covid-19 crisis is over? Click the "Club Speakers List" quicklink at <https://ema.arrrl.org/affiliated-clubs/>.

While I am in no way endorsing one product or service over another, Zoom seems like a pretty popular teleconference service these days. A free account will allow you to host a teleconference for up to 40 minutes for as many as 100 attendees. For \$14.99 per month you can host a teleconference for 100 people for 24 hours. For more information, go to <https://zoom.us/pricing>.

If you are looking for ideas as to how to move your club forward during the current Covid-19 crisis, please let me know. And let us know what your plans are so that we can keep this site up to date and share your activities with as many hams in eastern Massachusetts as we can.

73 de Bruce, K1BG

[My thanks to the ARRL EMA Section News—ed.]